Federal Alternative Fuel Vehicle Incentives and Laws

The information in this guide is current as of November 17, 1995. However, programs and laws are constantly changing, and although we did our best to keep up with these changes, this information will need to be updated on a continual basis. If your organization is not listed, or if the information on your organization's programs has changed, please call TG Powell, Clean Cities Consultant, Abacus Technology Corporation, at (301) 951-1717, and let us know so that corrections can be made in the next edition.

Overview

The main Federal incentives for the purchase or conversion of individual alternative fuel vehicles (AFVs) are the Federal income tax deductions of $2,000 to $50,000 for clean-fuel vehicles, and the income tax credit of up to $4,000 for electric vehicles (EVs). An income tax deduction is also available for the installation of refueling or recharging facilities for AFVs.

Except for the Federal tax credits and deductions, most of the Federal incentives are programmatic grants oriented toward large investments such as infrastructure and larger purchases. The lead agencies for AFV programs are the Department of Energy, the Department of Transportation, and the Environmental Protection Agency.

Highlights

- $2,000 - $50,000 Federal Income Tax deduction for the purchase or conversion of qualified clean-fuel vehicles
- Up to $4,000 Federal tax credit for 10% of the purchase price of an EV

U.S. Internal Revenue Service (IRS), U.S. Department of Treasury, 1111 Constitution Avenue, NW, Room 5214, CC:PSI:8, Washington, DC 20224.

$ Federal Tax Deduction for Clean-Fuel Vehicles and Certain Refueling Property.

A tax deduction for the purchase of a new original equipment manufacturer (OEM) qualified clean-fuel vehicle or for the conversion of a vehicle to use a clean-burning fuel is provided under the Energy Policy Act of 1992 (EPACT), PL-102-486, Title XIX-Revenue Provisions, Sec. 179A. The amount of the tax deductions for qualified clean-fuel vehicles are based on the gross vehicle weight (gvw) and types of vehicles as follows:

Truck or van (gvw of 10,000 - 26,000 lbs.)	$ 5,000
Truck or van (gvw more than 26,000 lbs.)	$50,000
Buses (with seating capacity of 20+ adults)	$50,000
All other vehicles (off-road vehicles excluded)	$ 2,000

The tax deduction for clean-fuel vehicles is available for business or personal vehicles, except electric vehicles eligible for the Federal EV tax credit. A tax deduction of up to $100,000 per location is available for qualified clean-fuel refueling property or recharging property for EVs. The equipment must be used in a trade or business.

$ Electric Vehicle Tax Credit: A tax credit for the purchase of qualified EVs and hybrid electric vehicles (HEVs) is provided under EPACT PL 102-486, Title XIX-Revenue Provisions, Sec. 30, Credit for Qualified Electric Vehicles. The size of the credit is 10% of the cost of the vehicle, up to a maximum credit of $4,000. Beginning in 2001, the size of the credit is reduced by 25% per year until the credit is fully phased out. To qualify for the credit, the vehicle must be powered primarily by an electric motor drawing current from batteries or other portable sources of electric current. All dedicated, plug-in only, EVs qualify for the tax credit. All series and some parallel HEVs meet these qualifications. The tax credit for EVs is available for business or personal vehicles.

The dollar amount for the Clean-Fuel Vehicle tax deductions and credits will be reduced after the year 2001 according to the following schedule: 2002: 25% reduction, 2003: 50% reduction, and 2004: 75% reduction. These deductions and credits are available between December 20, 1993 and December 31, 2004. For more information contact, Winston Douglas, Alternative Fuels Tax Provisions, at (202) 622-3110; or Frank Boland, Alcohol Fuel Tax Information, at (202) 622-3130; or call the toll-free order desk at (800) 829-3676, and ask for publication #553, Alternative Fuel Vehicle Tax Deduction Booklet.

U.S. Department of Energy (DOE), 1000 Independence Avenue, SW, Washington, DC, 20585. General telephone number: (202) 586-5000.

Energy Policy Act (EPACT) of 1992. EPACT accelerates the purchase requirements for AFVs by the Federal fleet, proposes eliminating the cap on Corporate Average Fuel Economy (CAFE) credits that manufacturers can earn by producing dual-fuel and flexible-fuel vehicles, and requires fleets in large urban areas to purchase AFVs. EPACT also establishes incentives for the purchase of AFVs and conversion of conventional gasoline vehicles to alternative fuels by the private sector and state and local governments.

State and Local Incentives Program. Section 409 of EPACT authorizes DOE to establish guidelines for implementing a state alternative fuels and AFV incentive program and authorizes $10 million per year for state and local AFV programs. Before launching the full-scale State and Local Incentives Program in December of 1994, the Department announced the winners of the State and Local Incentives Pilot Program. Grants were awarded to 19 states that developed creative projects to accelerate the use of AFVs. States were encouraged to partner with local governments and the private sector; those award winning projects that will result in funds available for AFVs are noted throughout this document. In March 1995, DOE issued a notice of proposed rulemaking that would establish a process for states to apply for financial assistance to implement AFV programs. However, at the time of publication, Congress was recommending that Section 409 be consolidataed with other DOE energy grants for states. See information on the State Energy Conservation Program below. For more information, contact Marcy Rood at (202) 586-8161.

CHAMP Program. Section 411 of EPACT establishes a National Certification Program to certify training programs on: installing retrofit equipment that converts gasoline fueled vehicles into AFVs or dual-fueled vehicles; maintaining and repairing AFVs; and maintaining and repairing AFV refueling systems. CHAMP also supports a nationwide scholarship program that is administered by the American Automobile Association (AAA). For more information on the CHAMP scholarship, contact James Dunst, National Manager, AAA at (407) 444-TEST. For further information on the CHAMP Program, contact Pauline Labrie, CHAMP Program, at (202) 586-1738.

State Energy Conservation Program (SECP). Grants are available annually to states to promote the conservation of energy and reduce the rate of growth of energy demand. These grants may be used for AFV projects. In fiscal year 1996, this program is expected to be administered as a consolidated grant to the states, and each state will decide how to allocate its program funds. For more information, contact your State Energy Office, or the DOE Regional Office for your region, which are listed under the Points of Contact section for your state, or contact Joseph Conrad at DOE Headquarters, at (202) 586-8039.

DOE/Urban Consortium Funds. DOE's Energy Municipal Energy Management Program has funded more than 250 projects that demonstrate innovative energy technologies and management tools in cities and counties through the Urban Consortium Energy Task Force (UCETF). Each year the task force requests proposals from major urban jurisdictions. After a review process, UCETF funds those projects that best define and demonstrate innovative and realistic technologies, strategies, and methods that can facilitate urban America's efforts to become more energy efficient and environmentally responsible. In the past, many AFV projects have received funding from the UCETF. For more information or a copy of the Request for Proposal (RFP), call Jack Werner at The Urban Consortium at (202) 626-2400; Mike Lindberg, UCETF Chairperson, at (503) 823-4890; or Sue Cadenhead, DOE Program Manager, Municipal Energy Management, at (202) 586-9120.

Petroleum Violation Escrow Account (PVE). Commonly referred to as "oil overcharge funds," the PVE was created from fines collected by the Federal Government from oil companies that over-charged consumers during the oil crises of the 1970s. The money is distributed to the states for use in energy efficiency programs. These funds are not taxpayer dollars and are generally used for demonstration projects since funds from the PVE account do not receive year-to-year funding increases. To find out about availability of PVE funds (type of projects funded and amount), contact DOE, Office of Technical and Financial Assistance at (202) 586-9187. For information concerning PVE funds in your state, contact your State Energy Office, which is listed under your state's Points of Contact section of this guide, or contact the Clean Cities Hotline at (800) CCITIES.

Alternative Motor Fuels Act of 1988 (AMFA). AMFA was originally designed to encourage the development and use of alternative fuels, as well as the production of AFVs. DOE manages several demonstration projects as required by AMFA. This Act has, in large part, been replaced and extended by the National Energy Policy Act of 1992 (EPACT).

Heavy-Duty State/Municipal Alternative Fuel Demonstration Program. Solicitations are issued in the Federal Register early in the calendar year for grants to pay incremental costs of AFVs. In fiscal year 1996, $1.2 million is expected to be available for this program. In fiscal year 1996, a light-duty and medium-duty program solicitation is slated to be added to this program. However, details on the funding level for the light- and medium-duty program were not available at the time of publication. For more information, contact Frank Mallgrave at (202) 586-8077.

U.S. Department of Transportation (DOT), Federal Highway Administration (FHA) and Federal Transit Administration (FTA), 400 7th Street SW, Washington, DC 20590. General telephone number: (202) 366-4000.

Congestion Mitigation and Air Quality (CMAQ) Improvement Program. CMAQ, established by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), directs funds to state transportation programs and projects which are likely to contribute to air quality improvements and transportation services. The primary focus of the CMAQ Program is to implement transportation control measures that are part of the states' air quality implementation plans, known as SIPs. Eligible projects and programs, including alternative fuel conversions, must be included in the transportation improvement programs (TIP) developed by the metropolitan planning organizations (MPO) in nonattainment areas.

States having ozone and/or carbon monoxide nonattainment areas, which meet the nonattainment classification contained in the CAAA, must use these apportioned funds in such nonattainment areas. States with no ozone or carbon monoxide nonattainment areas can use the CMAQ funds for any project eligible under CMAQ or ISTEA. Generally, the conversion of individual conventionally-powered vehicles to alternative fuels is not eligible under the CMAQ Program. However, the conversion or replacement of centrally-fueled fleets to alternative fuels are eligible, provided that the fleet is publicly owned (or leased) and operated and the fleet conversion is in response to a specific requirement in the Clean Air Act Amendments, or the fleet conversion is specifically identified in the State Implementation Plan (SIP) as part of the emissions reduction strategy of a nonattainment area.

Establishing on-site fueling facilities and other infrastructure needed to fuel AFVs are also eligible for CMAQ funds under the above conditions. This means that the vehicles and facility must be publicly owned (or leased) and that the use of AFVs must either be required under the CAAA or in the SIP. For more information about CMAQ or ISTEA, contact Mike Savonis of the Federal Highway Administration, at (202) 366-2080. For more information on programs in your area that are funded by CMAQ or ISTEA, contact your local MPO or State Transportation Contact, which are listed under each state's Points of Contact section of this guide.

Section 3 Discretionary and Formula Capital Program. This program provides funding for the establishment of new rail projects, improvement and maintenance of existing rail projects, and the rehabilitation of bus systems. Funding is not specifically designated for AFVs, but the funds provided by this program may be used to purchase alternative fuel buses. For most projects funded through Section 3, the Federal Transit Administration (FTA) will pay 80% of the total project costs. For more information, contact the regional FTA office for your state, which is listed in your state's Points of Contact section of this guide.

U.S. Environmental Protection Agency (EPA), 401 M Street, SW, Washington, DC 20460. General telephone number: (202) 260-2090.

Clean Air Act Amendments of 1990 (CAAA). CAAA sets emissions standards for stationary and mobile sources. The CAAA establishes targets, standards, and procedures for reducing human and environmental exposure to a range of pollutants generated by industry and transportation.

Air Pollution Control Program. This program, known as Section 105 grants, assists state and municipal agencies in planning, developing, establishing, improving, and maintaining adequate programs for prevention and control of air pollution or implementation of national air quality standards. States and municipalities may receive up to 60% Federal funds to implement their plans. Requests for application forms and completed applications are submitted to the appropriate EPA Regional Grants Administration Branch. For program information, contact Jerry Stubbefields, of the EPA, at (919) 541-0876.

Pollution Prevention Grants Program. This program supports the establishment and expansion of state pollution prevention programs and addresses various sectors of concern such as energy, transportation, industrial toxins, and agriculture. Funds awarded under this grant/cooperative agreement are awarded to support innovative pollution prevention programs that address the transfer of potentially harmful pollutants across all media -- air, land, and water. State agencies are required to contribute at least 50% of the total cost of their project. For more information, contact the Pollution Prevention Coordinator in your EPA Regional Office, which is listed in the Points of Contact section for your state.

AFV FUNDING WORKSHEET -- State of ______________________

PART 1 - Sources of Funding

Amount You Expect to Receive

I. State Incentives
____
____
______________________ $ [ ]

II. Utilities/Private Incentives
____
______________________ + $ [ ]
____

III. State Laws & Regulations
____
______________________ + $ [ ]
____

IV. Federal Tax Incentives
____
______________________ + $ [ ]
____

Total Funding = $ [ ]

PART 2 - Payback Period

1) To calculate an AFV's payback period, you first need to know the **Incremental Cost** of that vehicle compared to a comparable gasoline vehicle:

$ [ ] – $ [ ] = $ [ ] 1a

Initial Cost of AFV | Cost of Comparable Gasoline Vehicle | Incremental Cost *

* NOTE: If you are converting existing fleet vehicles, then substitute the conversion cost for the **Incremental Cost**.

2) Subtract from the **Incremental Cost**, box 1a, the **Total Funding** from the box at bottom of Part 1 to get the **Net Incremental Cost**.

$ [ ] – $ [ ] = $ [ ] 2a

Incremental Cost (from box 1a) | Total Funding (from part 1) | Net Incremental Cost

3) To find the **$ per mile fuel cost**, divide your fuel cost per gasoline gallon equivalent (gge) by your vehicle's miles per gallon (mpg). Do this calculation for both gasoline and the alternative fuel.

a) gasoline:

$ [ ] / [ ] mpg = $ [ ] 3a

$ per gallon | vehicle mpg | $ per mile fuel cost

b) alternative fuel:

$ [ ] / [ ] mpg = $ [ ] 3b

$ per gge | vehicle mpg | $ per mile fuel cost

c) electric:

$ [ ] / [ ] mi/kWh = $ [ ] 3c

$ per kWh | vehicle miles per kWh | $ per mile fuel cost

4) Then subtract the **$ per mile fuel cost** of your alternative fuel from the **$ per mile fuel cost** of gasoline to find your **$ savings per mile**.

$ [ ] – $ [ ] = $ [ ] 4a

$ per mile fuel cost gasoline (from box 3a) | $ per mile fuel cost alternative fuel (from box 3b or 3c) | $ savings per mile

5) Then divide the **Net Incremental Cost,** box 2a, by the **$ savings per mile,** box 4a, to get the payback period for your AFV in terms of miles.

$ [ ] / $ [ ] = [ ] miles

Net Incremental Cost (from box 2a) | $ savings per mile (from box 4a) | Payback in miles